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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,250	03/13/2001	Yutaka Kai	837.1963/JDH	9136

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EXAMINER
JACKSON, CORNELIUS H

ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/804,250	Applicant(s) KAI ET AL.	
	Examiner Cornelius H. Jackson	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover she t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 December 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

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Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Acknowledgment

1. Acknowledgment is made that applicant's Amendment, filed on 26 December 2002, has been entered. Upon entrance of the Amendment, claims 1, 9, 13 and 18 were amended and claims 21-24 were added. Claims 1-24 are now pending in the present application.

Claim Objections

2. Claim 9 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

3. Claim 10 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 3. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. Claim 11 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 4. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Claim 12 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 8. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. Claim 18 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 13. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

7. Claim 19 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 15. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

8. Claim 20 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 16. When two claims in an application are duplicates or else are so close in

content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

9. Claim 21 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 22. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

10. Claim 23 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 24. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claims 1, 9, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the control loop and the means for compensating (compensator) temperature control conditions, since it is unclear as to whether the control loop, which controls the temperatures of the plurality of laser diodes, controls the temperature of the plurality of laser diodes through some other omitted structure or through the means for compensating (compensator) temperature control. Claims 2-8 and 10-12 are rejected for depending on an indefinite claim.

14. Claims 1, 9, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite, since the means for compensating (compensator) is suppose to compensate temperature control conditions for the laser diodes, other than *by the use of* the reference laser diode, but also, the compensate temperature control conditions *follows* (*are* according to) a change in temperature control condition for the reference laser diode. Therefore, the Examiner views the limitation of "other than the reference laser diode selected from said plurality of laser diodes" as being unclear.

15. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite, since it is unclear as to what is meant by at a lower temperature, e.g. a temperature lower than what?

16. Claims 13, 18, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of

elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the control loop and the means for compensating (compensator), since it is unclear as to whether the control loop, which controls the temperatures of the plurality of laser diodes, controls the temperature of the plurality of laser diodes through some other omitted structure or through the means for compensating (compensator). Claims 14-17 and 19-20 are rejected for depending on an indefinite claim.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

18. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Stayt, Jr. et al. (6389046). Stayt, Jr. et al. disclose a light source device comprising a plurality of laser diodes; a temperature sensor provided in the vicinity of the plurality of laser diodes; a control loop for controlling the temperature of the plurality of laser diodes according to an output from the temperature sensor to thereby control the oscillation

wavelengths of the plurality of the laser diodes; and means for compensating temperature control conditions.

Regarding claim 2, Stayt, Jr. et al. disclose the oscillation wavelengths of the plurality of laser diodes are different from one another and are selectively driven, **see Fig. 4**.

Regarding claim 3, Stayt, Jr. et al. disclose the temperature sensor is a thermistor **190**, **see col. 8, lines 6-8**.

Regarding claim 4, Stayt, Jr. et al. disclose the change in the temperature control condition for the reference laser diode comprises a result of comparison between an initial set temperature and a latest set temperature, whereby a deterioration of the temperature sensor reflects the compensation of the temperature control conditions of the laser diodes other than the reference laser diode, **see col. 5, lines 52-59, col. 6, lines 24-67 and . col. 8, lines 3-8**.

Regarding claim 5, Stayt, Jr. et al. disclose the stated limitations, **see col. 7, lines 1-41**.

Regarding claim 6, Stayt, Jr. et al. disclose the positions of the plurality of laser diodes and the reference laser, **see Figs 1 and 4**.

Regarding claim 8, Stayt, Jr. et al. disclose the stated limitations, **see col. 3, lines 37-60**.

Regarding claims 9-12, Stayt, Jr. et al. teach all of the stated limitations, **see the corresponding claims above**. Also, the recitation that a wavelength control device has not been given patentable weight because it has been held that a preamble is

denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stayt, Jr. et al. (6389046). Stayt, Jr. et al., as applied to claims 1-6 and 8-12 above, teach all of the stated limitations, except for the temperature sensor being positioned near the center of the plurality of laser diode array. It would have been an obvious matter of design choice to place the temperature sensor near the center of the laser array, since applicant has not disclosed that by positioning the temperature sensor near the center of the array solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the temperature sensor positioned near the control laser.

21. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stayt, Jr. et al. (6389046) as applied to claims 1-12 above, and further in view of Eda et al. (5438579).). Stayt, Jr. et al. teach all of the stated limitations, except for the second

temperature sensor. Eda et al. teach a second temperature sensor **42**. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use as many temperature sensors as desired in order to obtain a more accurate temperature reading, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. Also it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 14-20, Stayt, Jr. et al. teach all the stated limitations, **see claims 9-12 above**.

Response to Arguments

22. Applicant's arguments filed 26 December 2002 have been fully considered but they are not persuasive. Applicant argued the following:

a. The Examiner's objections to claims 9-12 and 18-20 as being substantial duplicates of claims 1, 3, 4, 8, 13, 15 and 16, respectively, are respectfully traversed, since the foregoing claims meet the requirements of 37 CFR 1.75 (b) and MPEP 706.03(k) stating "a mere difference in the *scope* between claims has been held to be enough".

b. Neither Stayt nor Eda, either alone or in combination, discloses or suggests the features recited in each of the independent claims 1, 9, 13, 18, and 21-24 of the

present application (using the recitation of claim 1 as an example) "a plurality of laser diodes comprising a reference laser diode" and "compensating temperature control conditions for said laser diodes other than the reference laser diode selected from said plurality of laser diodes, according to a change in temperature control condition for said reference laser diode, wherein the reference laser diode is normally operative only at a lower temperature".

Examiner reply Applicant's arguments are as follows:

a. The Examiner's objections to claims 9-12 and 18-20 as being substantial duplicates of claims 1, 3, 4, 8, 13, 15 and 16, respectively, stands, because there is no *mere difference* in the *scope* between the claims, since the recitation of a "light source" or a "wavelength control device" has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

b. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., (using the recitation of claim 1 as an example) "a plurality of laser diodes comprising a reference laser diode" and "compensating temperature control conditions for said laser diodes other than the reference laser diode selected from said plurality of laser diodes, according to a change in temperature control condition for said reference laser diode, wherein the reference laser diode is normally operative only at a lower

temperature") are indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, **See *"Claim Rejections - 35 USC § 112"* above**. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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March 23, 2003